

## UTAH OIL AND GAS CONSERVATION COMMISSION

REMARKS: WELL LOG \_\_\_\_\_ ELECTRIC LOGS \_\_\_\_\_

FILE **X** WATER SANDS \_\_\_\_\_ LOCATION INSPECTION \_\_\_\_\_

SUB. REPORT/abd. \_\_\_\_\_

*99/119 L.A.D. eff 11-17-99!*DATE FILED **AUGUST 17, 1998**

LAND: FEE &amp; PATENTED \_\_\_\_\_

STATE LEASE NO. \_\_\_\_\_

PUBLIC LEASE NO. \_\_\_\_\_

**U-73687**

INDIAN \_\_\_\_\_

DRILLING APPROVED: **AUGUST 19, 1998**

SPUDDED IN: \_\_\_\_\_

COMPLETED: \_\_\_\_\_ PUT TO PRODUCING: \_\_\_\_\_

INITIAL PRODUCTION: \_\_\_\_\_

GRAVITY A.P.I. \_\_\_\_\_

GOR. \_\_\_\_\_

PRODUCING ZONES \_\_\_\_\_

TOTAL DEPTH \_\_\_\_\_

WELL ELEVATION: \_\_\_\_\_

DATE ABANDONED: *11-17-99 L.A.D.*FIELD: **UNDESIGNATED**

UNIT: \_\_\_\_\_

COUNTY: **UINTAH**WELL NO. **SAGE GROUSE 12B-14-8-22**API NO. **43-047-33178**LOCATION **2313 FSL** FT. FROM (N) (S) LINE. **707 FWL**FT. FROM (E) (W) LINE. **NW SW**1/4 - 1/4 SEC. **14**

TWP. \_\_\_\_\_

RGE. \_\_\_\_\_

SEC. \_\_\_\_\_

OPERATOR \_\_\_\_\_

TWP. \_\_\_\_\_

RGE. \_\_\_\_\_

SEC. \_\_\_\_\_

OPERATOR \_\_\_\_\_

**8S****22E****14****CHANDLER & ASSOCIATES**

**COPY**  
UNITED STATES

SUBMIT IN TRIPLICATE\*  
(Other instructions on  
reverse side)

Form approved.  
Budget Bureau No. 1004-0136  
Expires: December 31, 1991

DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**APPLICATION FOR PERMIT TO DRILL OR DEEPEN**

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL  
WELL ☐

GAS  
WELL ☒

OTHER

SINGLE  
ZONE ☐

MULTIPLE  
ZONE ☐

2. NAME OF OPERATOR

(303) 295-0400

Chandler & Associates, Inc.

3. ADDRESS AND TELEPHONE NO.

475 Seventeenth Street, Suite 1000 Denver, CO 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*

At surface

706' 2313' FSL 707' FWL (surface)

At proposed prod. zone

2806' FSL 707' FWL (bottom hole)

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

See Topo Map "A" (attached)

15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drig. unit line, if any)

707'

16. NO. OF ACRES IN LEASE

1920

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

40

18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

1600'

19. PROPOSED DEPTH

3840' TVD 4084' MD

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

5098' GR

22. APPROX. DATE WORK WILL START\*

A.S.A.P.

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	9 5/8"	36#	300' TVD	(See attached drilling plan)
8 3/4"	7"	23#	3700' TVD	(See attached drilling plan)
6 1/4"	4 1/2"	105#	3600' TVD	(See attached drilling plan)
			3840' TVD	

1. M.I.R.U.

2. Drill to T.D. 3840' TVD 4084' MD

3. Run 7" casing and 4 1/2" liner if commercial production is indicated.

4. If dry hole, well will be plugged and abandoned as instructed by the BLM

5. Well will be drilled with fresh water to 3804' MD, then Air to T.D. mud  
will be in place to run 7" casing and 4 1/2" liner.

I hereby certify that I am responsible by the terms and conditions of the lease  
to conduct lease operations. Bond Coverage pursuant to 43 CFR 3104 for lease  
activities is being provided by Chandler & Associates, Inc. BLM Bond #124290364  
with CNA.

**RECEIVED**  
AUG 12 1998

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or  
deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout prevention program, if any.

24.

SIGNED

Tracy P. Henline

TITLE

Agent for Chandler

DATE

Aug. 7, 1998

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY

TITLE

DATE

\*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the  
United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**T8S, R22E, S.L.B.&M.**

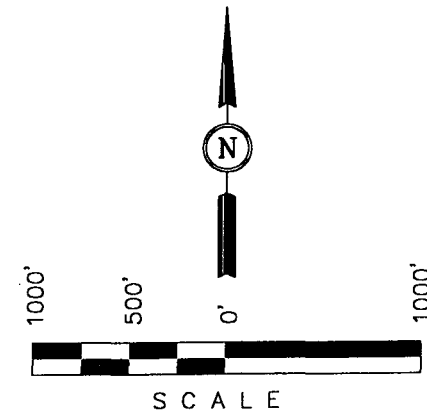
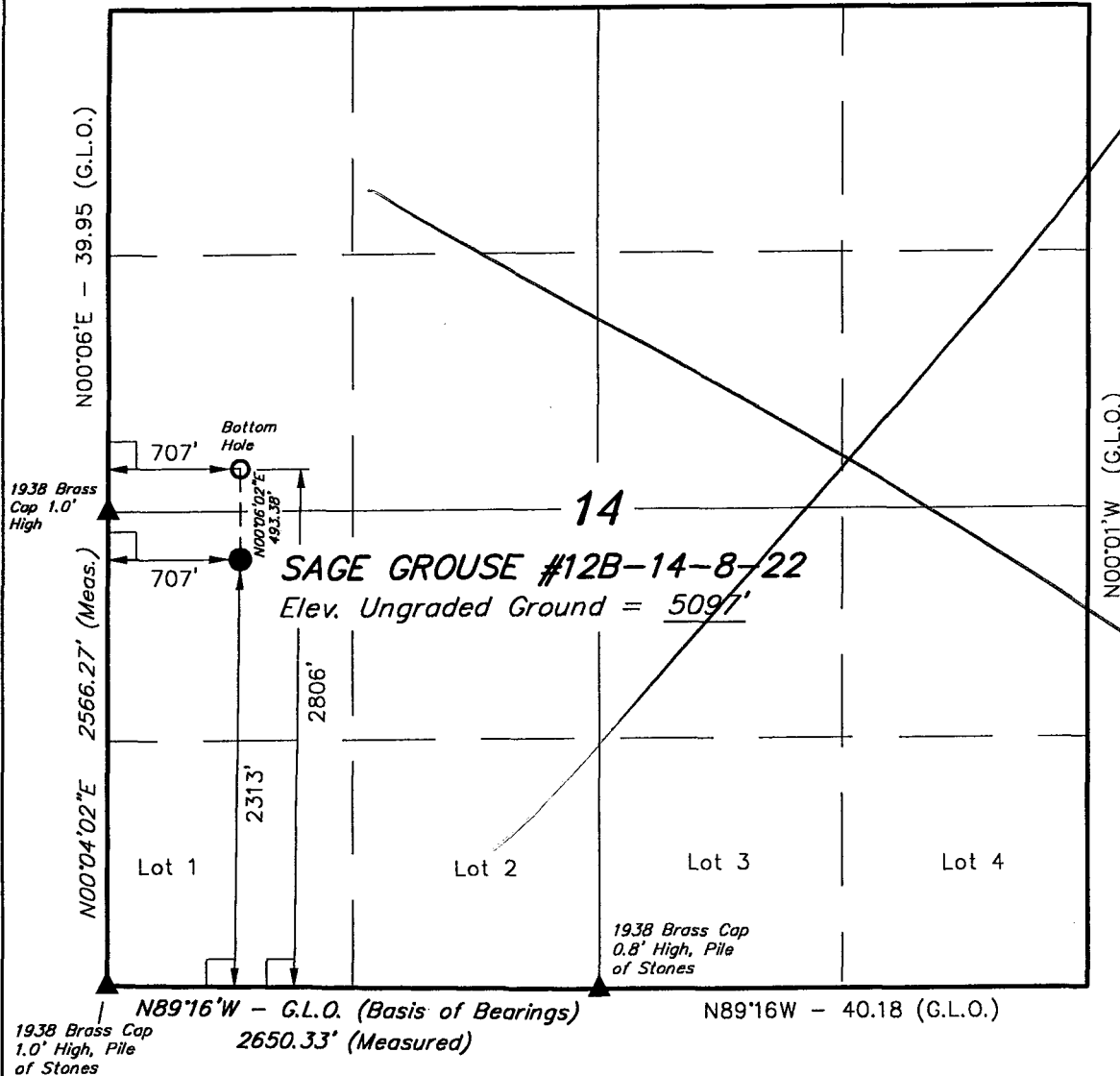
**CHANDLER & ASSOCIATES, INC.**

Well location, SAGE GROUSE #12B-14-8-22, located as shown in the NW 1/4 SW 1/4 of Section 14, T8S, R22E, S.L.B.&M. Uintah County, Utah.

WEST - 80.12 (G.L.O.)

**BASIS OF ELEVATION**

SPOT ELEVATION AT THE SOUTHWEST CORNER OF SECTION 14, T8S, R22E, S.L.B.&M. TAKEN FROM THE RED WASH SW QUADRANGLE, UTAH, UTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5070 FEET.



THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

**CERTIFICATE**  
 REGISTERED LAND SURVEYOR  
 REGISTRATION NO. 1319  
 STATE OF UTAH

**UINTAH ENGINEERING & LAND SURVEYING**  
 85 SOUTH 200 EAST - VERNAL, UTAH 84078  
 (435) 789-1017

**LEGEND:**

- └─┘ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

SCALE 1" = 1000'	DATE SURVEYED: 7-10-98	DATE DRAWN: 7-15-98
PARTY L.D.T. C.G. C.B.T.	REFERENCES G.L.O. PLAT	
WEATHER HOT	FILE CHANDLER & ASSOCIATES, INC.	

# CHANDLER & ASSOCIATES, INC.

## DRILLING PLAN FOR THE SAGE GROUSE #12B-14-8-22

### I. DRILLING PLAN:

1. Geological Surface Formation: Uintah

2. Estimated Tops:

<u>Name</u>	<u>Top TVD</u>	<u>Top MD</u>	<u>Prod. Phase Anticipated</u>
Green River	2935'	2935'	
Sage Grouse	3700'	3804'	GAS
TD	3840'	4084'	

3. CASING PROGRAM:

	<u>Depth</u>	<u>Hole Size</u>	<u>Csg. Size</u>	<u>Type</u>	<u>Weight</u>
Surface	300' TVD	12-1/4"	9-5/8"	K-55 ST&C	36#/ft (new)
Inter.	3700' TVD 3804' MD	8-3/4"	7"	J-55 LT&C	23#/ft (new)
Liner	3600' TVD 3704' MD 3840' TVD 4084' MD	6-1/4"	4-1/2"	J-55 ST&C	105#/ft (new)

4. Operator's Specification for Pressure Control Equipment:

- A. 2,000 psi W.P. Double Gate BOP or Single Gate BOP (Schematic attached).
- B. Functional test daily.
- C. All casing strings shall be pressure-tested (0.2 psi/foot or 1500 psi, whichever is greater) prior to drilling the plug after cementing; test pressure shall not exceed the internal yield pressure of the casing.
- D. All ram-type preventers and related control equipment shall be tested at the rated working pressure of the stack assembly or at 70 percent of the minimum internal yield pressure of the casing, whichever is less. Tests shall be done at the time of installation, prior to drilling out, and weekly. All tests shall be for a period of 15 minutes.

Chandler & Associates, Inc.  
Sage Grouse #12B-14-8-22

5. Auxiliary Equipment:

- A. Kelly Cock - yes.
- B. Float at the bit - no.
- C. Monitoring equipment on the mud system - Manned gas detection unit 2000' - TD..
- D. Full opening safety valve on rig floor - yes.
- E. Rotating head - no.
- F. The blooie line shall be a least 6" in diameter and extend at least 100' from the wellbore into the reserve/blooie pit.
- G. Blooie line ignition shall be provided by a continuous pilot (ignited when drilling below 500').
- H. Compressor shall be tied directly to the blooie line through a manifold.
- I. A mistor with a continuous stream of water shall be installed near the end of the blooie lines for dust suppression.

6. Proposed Circulating Medium:

<u>Depth</u>	<u>Mud Type</u>	<u>Density (lb./gal)</u>	<u>Viscosity</u>	<u>Water Loss</u>
0'-3804' MD	Fresh Water	8.4	30	No Control
3804' MD-TD	Air			

7. Testing, Logging, and Coring Program:

- A. Cores - None anticipated.
- B. DST - none anticipated.

Chandler & Associates, Inc.  
Sage Grouse #12B-14-8-22

- C. Logging - DIL-GR (3804' MD to base of surface casing).  
FDC/CNL/Cal DIL-GR (TD to base of intermediate).
- D. Formation and Completion Interval: Sage Grouse interval, final determination of completion will be made by analysis of logs.  
Stimulation - Stimulation will be designed for the particular area of interest as encountered.
- E. Frac gradient - approximately .80 psi/ft.

8. Cementing Program:

<u>Casing</u>	<u>Volume</u>	<u>Type &amp; Additives</u>
Surface	160 sx	Class "G" w/2% CaCl <sub>2</sub> (based on 100% access)
Production	365 sx*	50/50 poz.-mix
Liner	none	

Cement Characteristics:

Class "G" - yeild = 1.18 cu.ft. per. sack  
weight = 15.8 lb./gal  
strength = 3200 psi in 72 hrs @ 135 degrees

Super "G" - yeild = 2.76 cu.ft. Per. Sack  
weight = 11.08 lb./gal.  
Strength = 630 psi in 72 hrs @135 degrees

\* Final cement volumes to be calculated from caliper log with an attempt to be made to circulate cement to the surface. A bond log will be run across the zone of interest and across zones as required by the authorized officer to insure protection of natural resources.

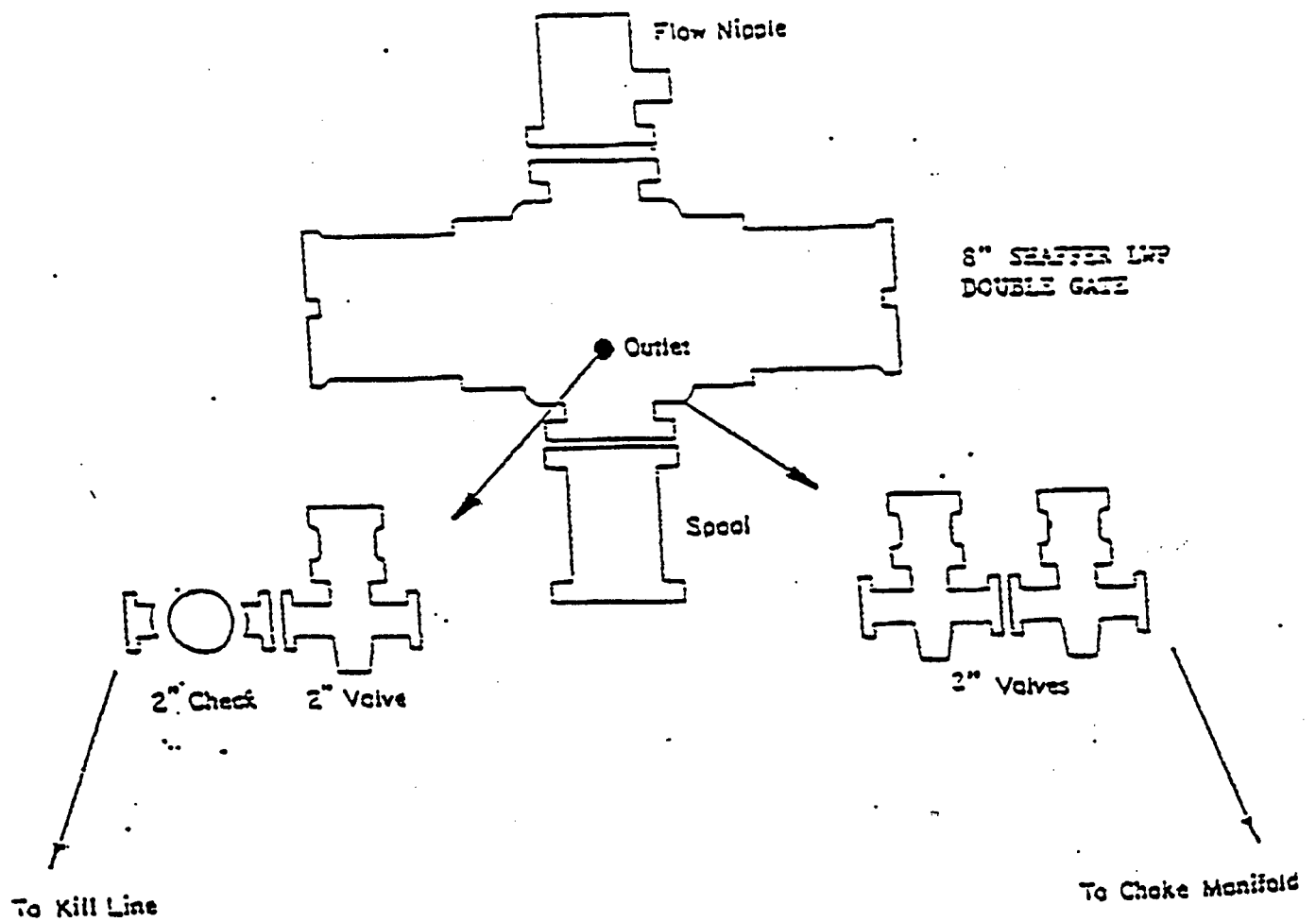
Chandler & Associates, Inc.  
Sage Grouse #12B-14-8-22

9. Anticipated Abnormal Pressures and Temperatures, Other Potential Hazards:

No abnormal temperatures or pressures are anticipated. No  $H_2S$  has been encountered in or known to exist from previous wells drilled to similar depths in the general area. Maximum anticipated bottom hole pressure equals approximately 1,600 psi (calculated at 0.392 psi/ft) and maximum anticipated surface pressure equals approximately 702 psi (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/ft).

# CHANDLER DRILLING

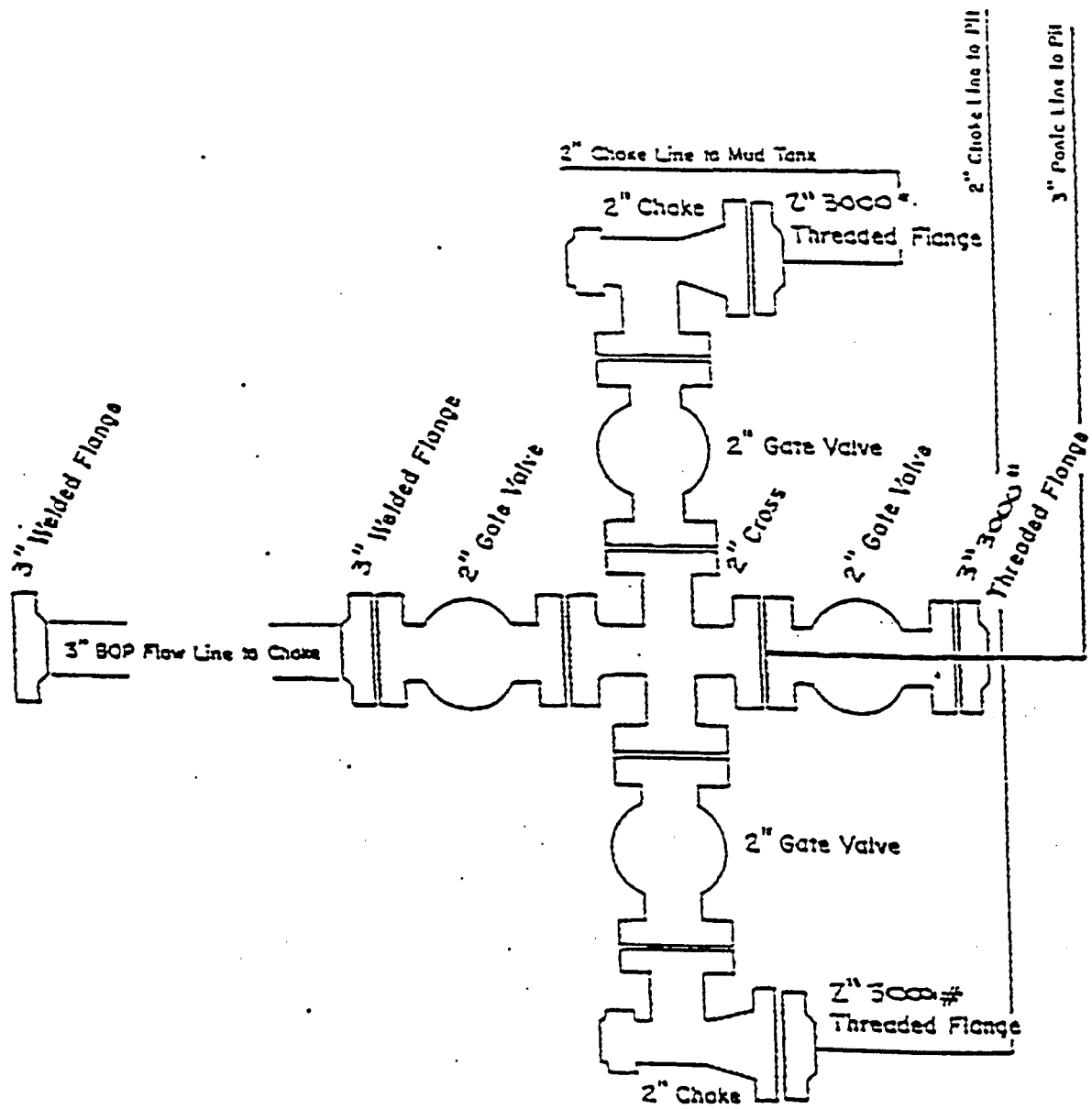
RIG NO.7





# CHANDLER DRILLING

RIG NO.7



**II. SURFACE USE PLAN**  
**CHANDLER & ASSOCIATES, INC.**  
**SAGE GROUSE #12B-14-8-22**

1. Existing Road:

- A. Topo Map "A" is the vicinity map, showing the access routes from Vernal, Utah.
- B. Topo Map "B" shows the proposed access road to each individual well. It also shows existing roads in the immediate area.
- C. The existing and proposed access road, unless otherwise stated, shall be crowned, ditched, and dipped from the nearest improved road.
- D. Occasional maintenance blading and storm repairs will keep roads in good condition.
- E. There shall be no mud blading on the access road. Vehicles may be towed through the mud provided they stay on the roadway.

2. Planned Access Roads:

The proposed access road, will be crowned, ditched, and dipped.

- A. Maximum grade will be 8% or less, unless otherwise stated.
- B. No turnouts will be required.
- C. Road surface material will be that native to the area.

Chandler & Associates, Inc.  
Sage Grouse #12B-14-8-22

- D. No cattleguard will be required.
- E. The proposed access road was flagged at the time the location was staked.
- F. The area authorized officer will be contacted at least 24 hours prior to commencing construction of the access road and well pad.
- G. The backslopes of the proposed access roads will be no steeper than vertical or 1/4:1 in rock; and 2:1, elsewhere.

The operator or his contractor will notify the B.L.M. office at least 48 hours prior to commencement of any work on these locations, roadways, or pipelines.

3. Location of Existing Wells:

See Topo Map "C"

4. Location of Existing and/or Proposed Facilities:

- A. All Petroleum Production Facilities are to be contained within the proposed location sites.
- B. In the event that production of these wells is established, the following will be shown:
  - 1. Proposed location and attendant lines, by flagging, if off well pad.
  - 2. Dimensions of facilities.
  - 3. Construction methods and materials.

Chandler & Associates, Inc.  
Sage Grouse #12B-14-8-22

- C. The area used to contain the proposed production facilities will be built using native materials. If these materials are not acceptable, then other arrangements will be made to acquire them from private sources. These facilities will be constructed using bulldozers, graders, and workman crews to construct and place the proposed facilities.
- D. All permanent facilities placed on the locations shall be painted a non-reflective color which will blend with the natural environment.
- E. A dike shall be constructed around the tank battery, of sufficient capacity to adequately contain at least 110 percent of the storage capacity of the largest tank within the dike.
- F. All buried pipelines shall be covered to a depth of 3 feet except at road crossings where they shall be covered to a depth of 4 feet.
- G. Construction width of the right-of way/pipeline route shall be restricted to 30 feet of disturbance.
- H. Pipeline location warning signs shall be installed within 90 days upon completion of construction.

5. Location and Type of Water Supply:

Water will be obtained from a water well located near Ouray, Utah which is owned by A-1 Tank Rental (Permit #43-8496) and transported by Dalbo Trucking Co. along the access roads which are shown on the attached maps.

Chandler & Associates, Inc.  
Sage Grouse #12B-14-8-22

6. Source of Construction Materials:

- A. No construction materials are needed for drilling operations. In the event of production, the small amount of gravel needed for facilities will be hauled in by truck from a local gravel pit over existing access roads from the area. No special access other than for drilling operations and pipeline construction is needed.
- B. All access roads crossing B.L.M. Land are described under item #2 and shown on Map #B.

All Construction material for these location sites and access roads shall be borrow material accumulated during the construction of the location sites and access roads. No additional construction material from other sources is anticipated at this time, but if it is required, the appropriate actions will be taken to acquire it from private sources.

- C. All well pad surface disturbance area is on B.L.M. lands

7. Methods for Handling Waste Disposal:

- A. Drill cuttings will be buried in the reserve pit when covered.
- B. Drilling fluids will be contained in the reserve pit.
- C. Any hydrocarbon liquids produced while production testing will be contained in a test tank. Any unavoidable spills of oil or other adverse substances or materials will be removed immediately during drilling progress or during completion operations.
- D. Portable chemical toilets will be provided and serviced by a local commercial sanitary service.

Chandler & Associates, Inc.  
Sage Grouse #12B-14-8-22

- E. Garbage and trash will be collected in a trash cage and its contents hauled to a sanitary landfill.

All wastes caused by the construction activities shall be promptly removed and disposed of in a sanitary landfill or as directed by the authorized officer.

- F. Prior to commencement of drilling, the reserve pit will lined with a min. 10 mil liner over an adequate amount of straw bedding. It will also be fenced on three sides using 39-inch net wire with at least one (1) strand of barbed wire. All wire is to be stretched before attaching to corner posts. When drilling activities are completed it will be fenced on the fourth side and allowed to dry (if liquids are present). After drying, the fences will be removed and the pit shall be buried. Reclamation will be undertaken no later than the fall of the year after all drilling activity has ceased.

8. Ancillary Facilities:

No air strips, camps, or other living facilities will be built off the location. Housing and office trailers will be on the location as seen on the location layout.

9. Well Site Layout:

- A. See attached cutsheet.
- B. The areas authorized officer will be contacted at least 24 hours prior to commencing construction of the access road and well pad.
- C. The authorized officer will determine after the location is constructed whether the pit is to be lined, and if so, the type of material to be used.
- D. Topsoil shall be stripped to a depth of 4 to 6 inches and stockpiled as shown on the location layout plat.
- E. The backslopes of the locations will be no steeper than vertical or 1/4:1 in rock, and 2:1 elsewhere.

Chandler & Associates, Inc.  
Sage Grouse #12B-14-8-22

- F. The upper edges of all cut banks on the access roads and well pads will be rounded.

10. Plans for Restoration:

- A. Immediately upon completion, the location and surrounding area will be cleared of all debris, materials, trash and junk not required for production.
- B. Before any dirt work to restore the location takes place, the reserve pit must be completely dry. The reserve pit will be reclaimed within 90 days from the date of well completion.
- C. The area officer shall be notified at least 48 hours prior to commencing reclamation work.
- D. All disturbed areas will be seeded with the a mixture which is found suitable by the B.L.M.
- E. The seed bed will be prepared by disking, following the natural contour. Drill seed on contour at a depth no greater than 1/2 inch. In areas that cannot be drilled, the seed will be broadcast at double the seeding rate and harrowed into soil. Certified seed is recommended.
- F. Fall seeding will be completed after September, and prior to prolonged ground frost.

Chandler & Associates, Inc.  
Sage Grouse #12B-14-8-22

- G. If the well is a producer, access roads will be upgraded and maintained as necessary to prevent soil erosion, and accommodate year round traffic. Areas unnecessary to operations will be reshaped, topsoil distributed, and seed distributed according to the above mixtures. Perennial vegetation must be established. Additional work shall be required in case of seeding failures, etc.
- H. If the well is abandoned or is a dry hole, the access road and location will be restored to approximate the original contours. During reclamation of the site the fill material will be pushed into cuts and up over the backslope. No depressions will be left that would trap water or form ponds. Topsoil will be distributed evenly over the location and seeded according to the above mixture. The access road and the location shall be ripped or disked prior to seeding. Perennial vegetation must be established. Additional work shall be required in case of seeding failures, etc.
- I. Annual or noxious weeds shall be controlled on all disturbed areas. Method of control shall be by an approved mechanical method or an Environmental Protection Agency (EPA) registered herbicide. All herbicide application proposals must be approved. Application of herbicides must be under direct field supervision of an EPA certified pesticide applicator.

11. Other Information:

- A. The area is used by man for the primary purpose of grazing domestic livestock.

All activity shall cease when soils or road surfaces become saturated to a depth of three inches, unless otherwise approved by the Authorized Officer.

If any fossils are discovered during construction, the operator shall cease construction immediately and notify the Authorized Officer so as to determine the significance of the discovery.

- B. A Class III cultural resource inventory shall be completed prior to disturbance by a qualified professional Archaeologist.



Chandler & Associates, Inc.  
Sage Grouse #12B-14-8-22

- C. The B.L.M. considers the development of groundwater resources to be necessary and frequently indispensable to effective land management. Therefore, any groundwater intercepted by the party conducting mineral exploration shall be reported to the authorized officer immediately including approximate quantities and a sample in a sealed quart container. The B.L.M. shall have the first opportunity to file State water rights for the intercepted groundwater. The undersigned may file for water rights only with a written waiver from the State.
- D. The operator is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials and contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

whether the materials appear eligible for the National Register of Historic Places;  
the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

Chandler & Associates, Inc.  
Sage Grouse #12B-14-8-22

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, an operator will then be allowed to resume construction.

- E. Less than 10,000 pounds of any chemical(s) from EPA's Consolidated list of Chemicals Subject to Reporting Under Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986, and less than threshold planning quantity (TPQ) of any extremely hazardous substances(s), as defined in 40 CFR, would be used, produced, transported, stored, disposed, or associated with the proposed action.

12. Lessee's or Operator's Representative:

Mr. Terry Cox  
Vice President of Operations/Production  
Chandler & Associates, Inc.  
475 Seventeenth Street  
Suite 1000  
Denver, Colorado 80202  
Telephone #(303)295-0400

Chandler & Associates, Inc.  
Sage Grouse #12B-14-8-22

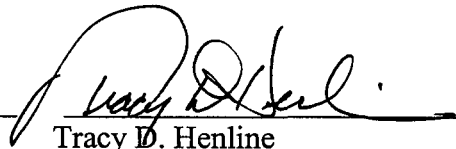
13. Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite(s) and access route(s); that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by **Chandler & Associates, Inc.**, and its contractors and subcontractors in conformity with the plan and the terms and conditions under which it is approved.

This statement is subject to the provision of 18 U.S.C. 1001 for the filing of a false statement.

Date

8-7-98



Tracy D. Henline  
Agent

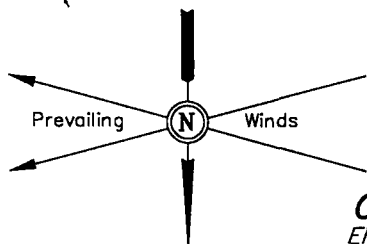
# CHANDLER & ASSOCIATES, INC.

## LOCATION LAYOUT FOR

SAGE GROUSE #12A & 12B-14-8-22

SECTION 14, T8S, R22E, S.L.B.&M.

NW 1/4 SW 1/4



C-7.9'  
El. 5104.6'

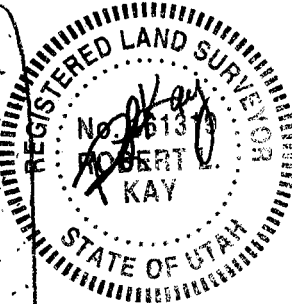
C-3.3'  
El. 5100.0'

Round Corners  
as Needed

SCALE: 1" = 50'  
DATE: 7-15-98  
Drawn By: C.B.T.  
Revised: 8-7-98 C.B.T.

### NOTE:

Flare Pit is to  
be located a min.  
of 100' from the  
Well Head.



Topsoil  
Stockpile  
El. 5101.8'  
C-13.1'  
(btm. pit)  
Flare Pit  
El. 5099.7'  
C-3.0'

Pit Capacity With  
2' of Freeboard  
is ±6,260 Bbls.

Approx.  
Top of  
Cut Slope

Reserve Pit Backfill  
& Spoils Stockpile

El. 5101.2'  
C-12.5'  
(btm. pit)

RESERVE PITS  
(8' Deep)

Sta. 0+50

El. 5098.6'  
C-1.9'

C-6.8'  
El. 5103.5'

Proposed Access  
Road

PIPE RACKS

C-1.1'  
El. 5097.8'

C-0.5'  
El. 5097.2'  
DOG HOUSE

RIG

WATER

PUMP

MUD SHED

HOPPER

POWER

TOOLS

FUEL

TRASH

STORAGE  
TANK

FUEL

TRAILER

TOILET

F-3.9'  
El. 5092.8'

Sta. 1+69

Approx.  
Toe of  
Fill Slope

F-4.0'  
El. 5092.7'

Sta. 0+00

Elev. Ungraded Ground at Location Stake = 5097.2'

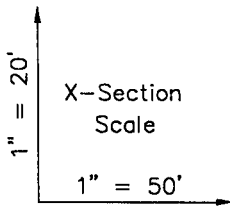
Elev. Graded Ground at Location Stake = 5096.7'

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

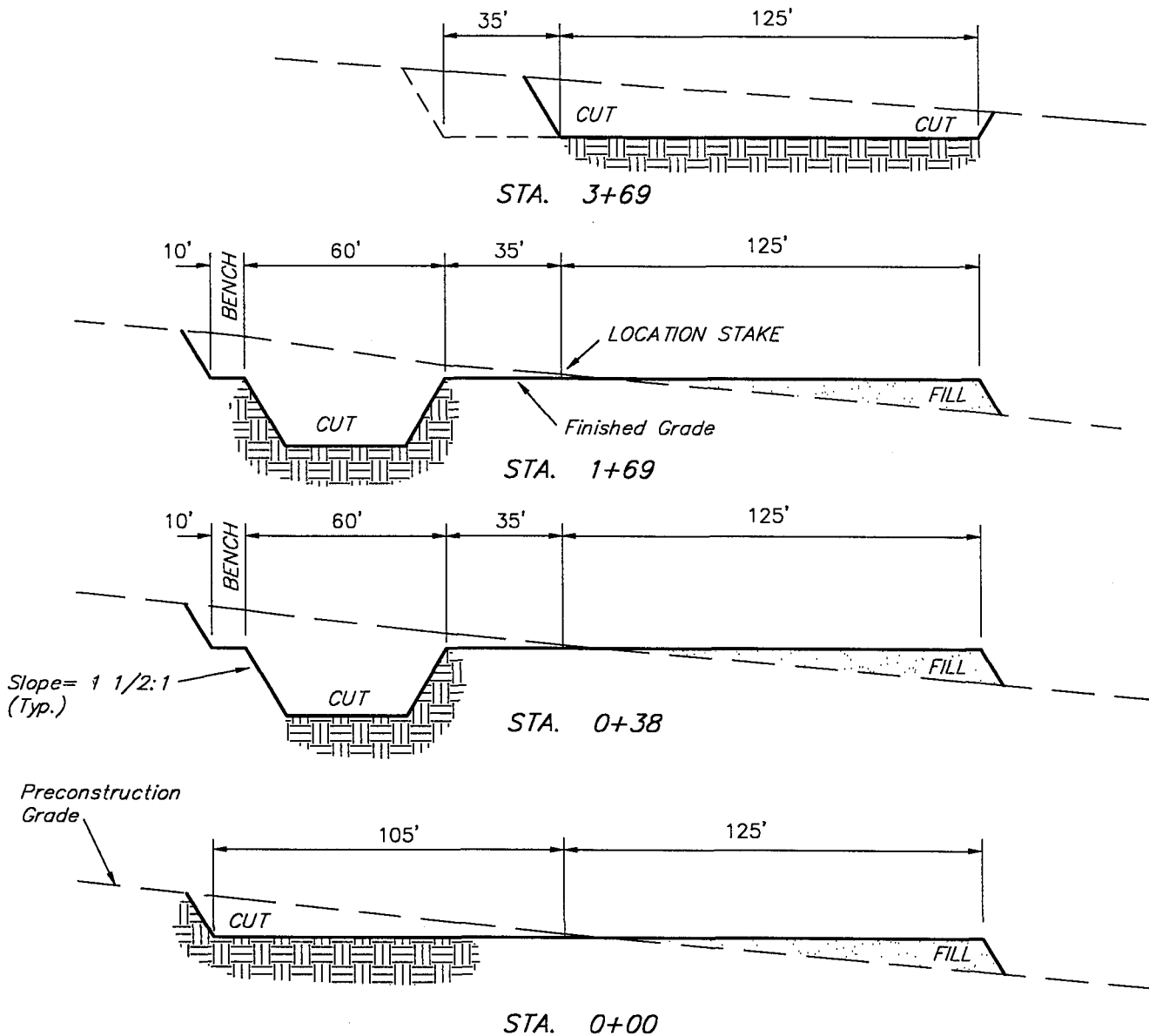
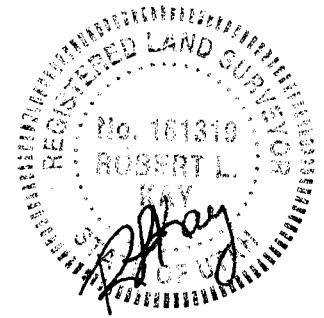
# CHANDLER & ASSOCIATES, INC.

## TYPICAL CROSS SECTIONS FOR

SAGE GROUSE #12A & 12B-14-8-22  
SECTION 14, T8S, R22E, S.L.B.&M.  
NW 1/4 SW 1/4



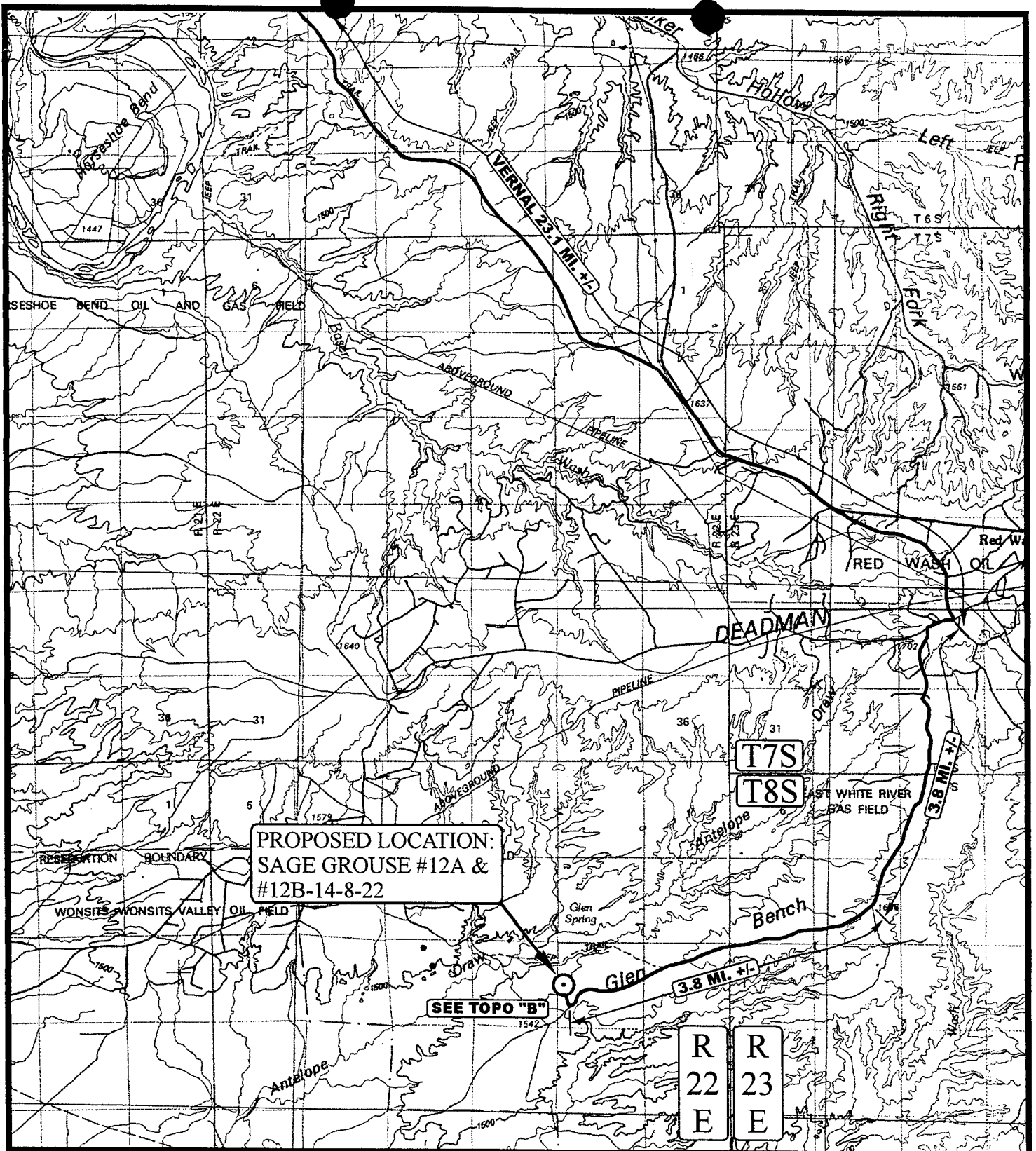
DATE: 7-15-98  
Drawn By: C.B.T.



### APPROXIMATE YARDAGES

(6") Topsoil Stripping	=	1,320 Cu. Yds.
Remaining Location	=	7,020 Cu. Yds.
<b>TOTAL CUT</b>	<b>=</b>	<b>8,340 CU.YDS.</b>
<b>FILL</b>	<b>=</b>	<b>2,380 CU.YDS.</b>

EXCESS MATERIAL AFTER 5% COMPACTION	=	5,830 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	=	2,320 Cu. Yds.
EXCESS UNBALANCE (After Rehabilitation)	=	3,510 Cu. Yds.



# LEGEND:

○ PROPOSED LOCATION

CHANDLER & ASSOCIATES, INC.

SAGE GROUSE #12A & #12B-14-8-22

SECTION 14, T8S, R22E, S.L.B.&M.

NW 1/4 SW 1/4



Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813



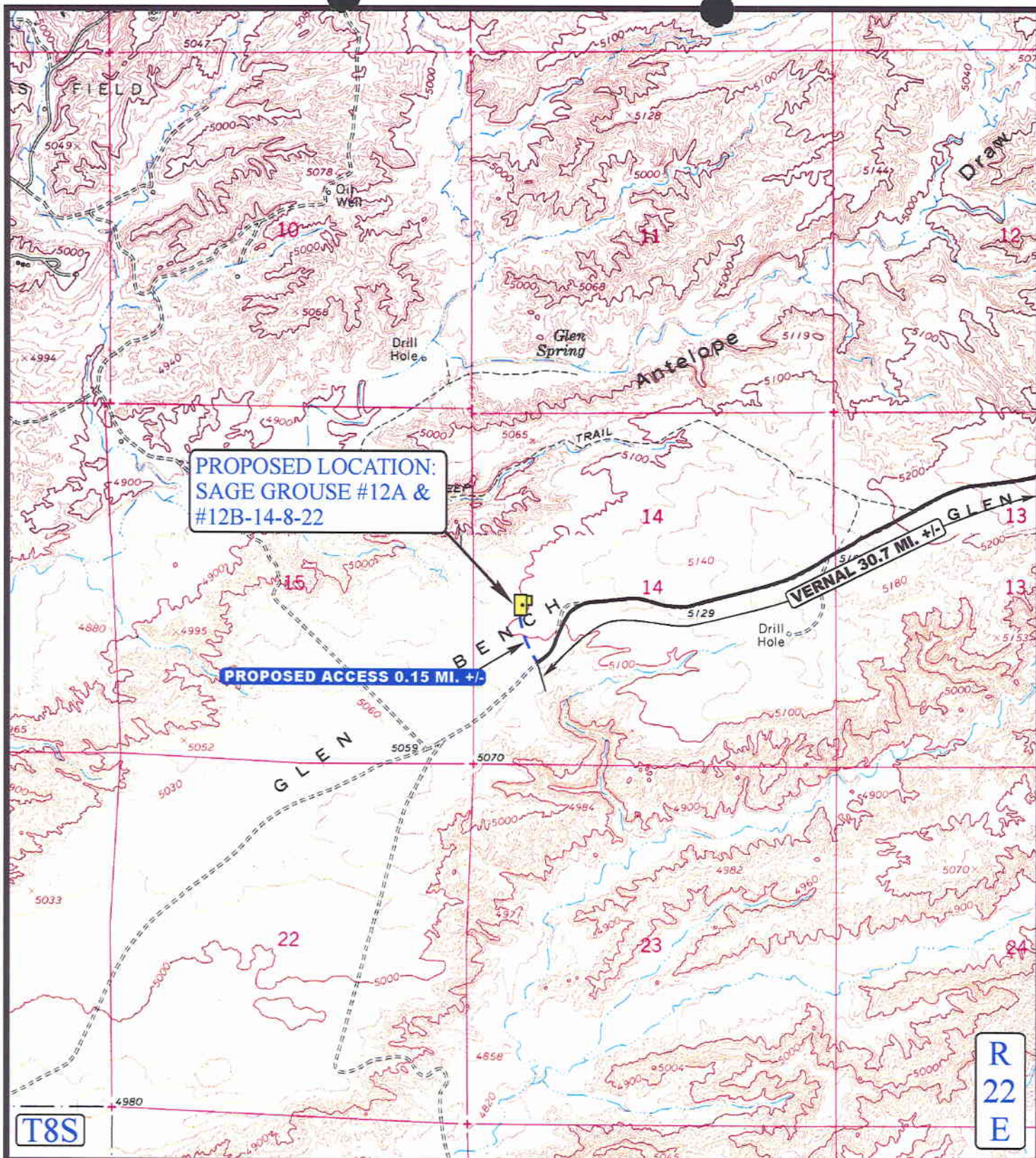
TOPOGRAPHIC  
MAP

7 14 98  
MONTH DAY YEAR

SCALE: 1 : 100,000 DRAWN BY: J.L.G. REVISED: 00-00-00

A  
TOPO





# LEGEND:

--- PROPOSED ACCESS ROAD  
 --- EXISTING ROAD

CHANDLER & ASSOCIATES, INC.

SAGE GROUSE #12A & #12B-14-8-22

SECTION 14, T8S, R22E, S.L.B.&M.

NW ¼ SW ¼



Uintah Engineering & Land Surveying  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813



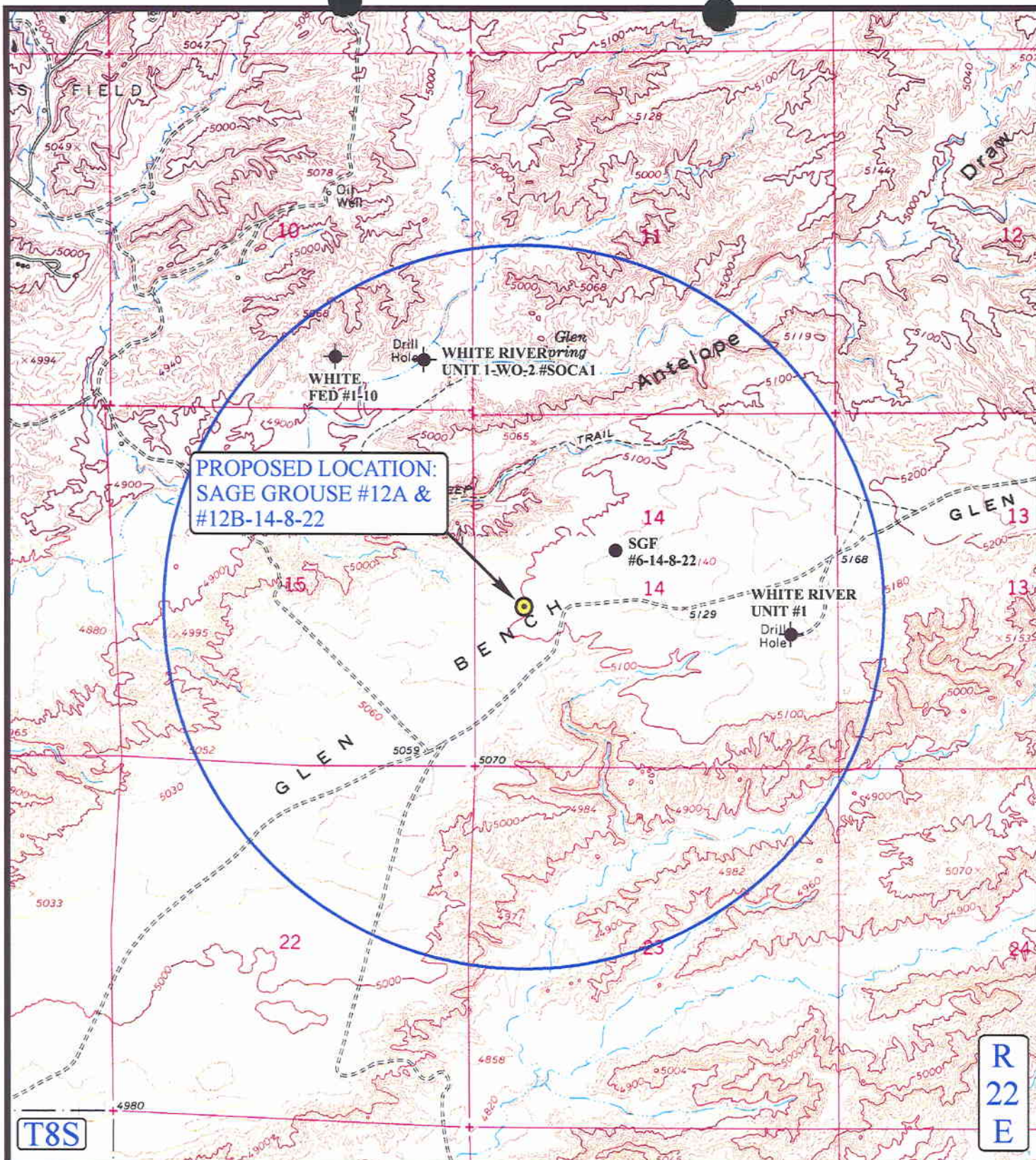
TOPOGRAPHIC  
 MAP

7 14 98  
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: J.L.G. REVISED: 00-00-00

B  
 TOPO





# LEGEND:

- DISPOSAL WELLS
- PRODUCING WELLS
- SHUT IN WELLS
- WATER WELLS
- ABANDONED WELLS
- TEMPORARILY ABANDONED

CHANDLER & ASSOCIATES, INC.

SAGE GROUSE #12A & #12B-14-8-22  
SECTION 14, T8S, R22E, S.L.B.&M.  
NW ¼ SW ¼

UEIS

Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

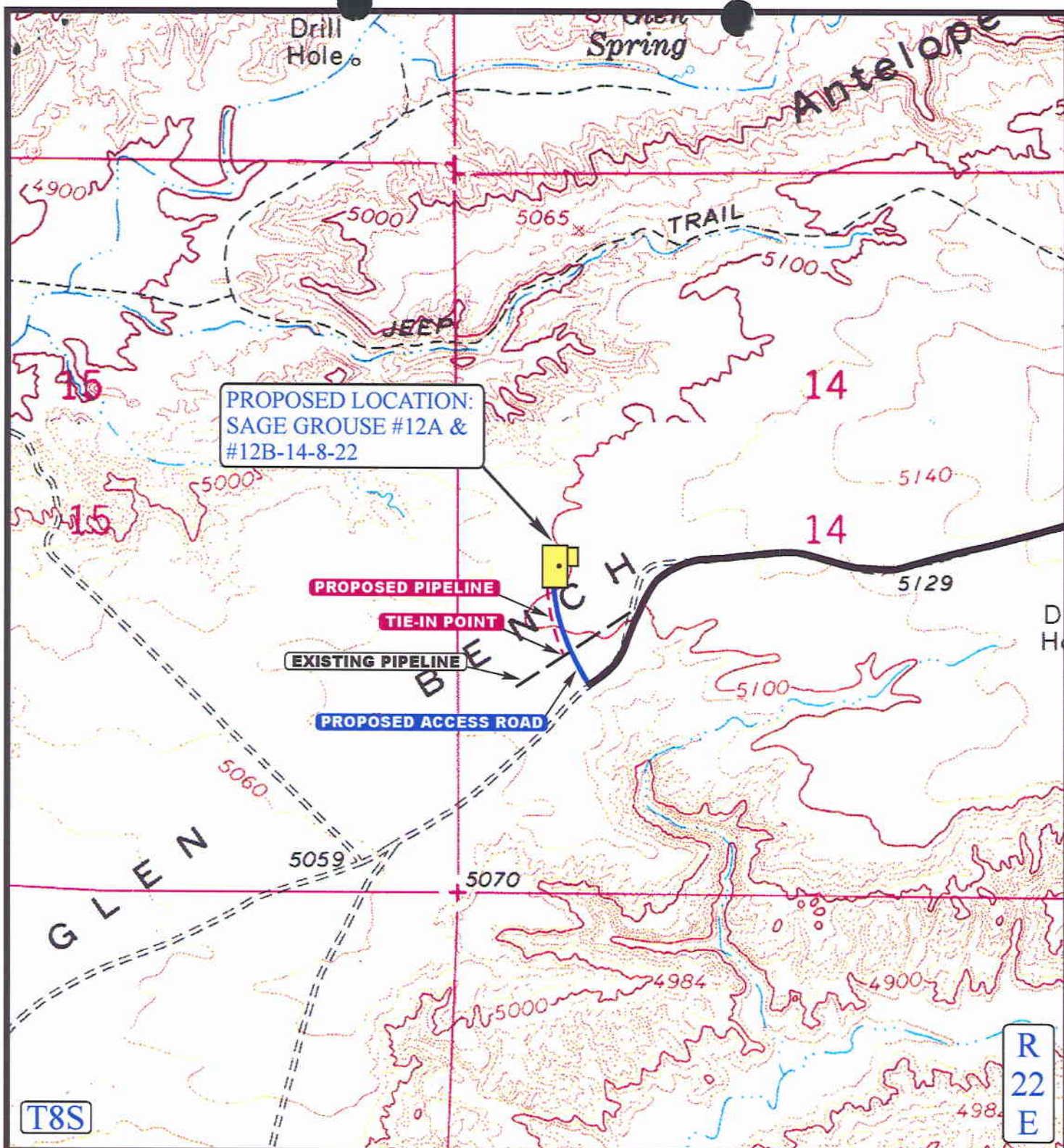
TOPOGRAPHIC  
MAP

7 14 98  
MONTH DAY YEAR

C  
TOPO

SCALE: 1" = 2000' DRAWN BY: J.L.G. REVISED: 00-00-00





APPROXIMATE TOTAL PIPELINE DISTANCE = 450' +/-

LEGEND:

- EXISTING PIPELINE
- - - PROPOSED PIPELINE
- PROPOSED ACCESS

CHANDLER & ASSOCIATES, INC.

SAGE GROUSE #12A & #12B-14-8-22

SECTION 14, T8S, R22E, S.L.B.&M.

NW ¼ SW ¼



Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813



TOPOGRAPHIC  
MAP

7 14 98  
MONTH DAY YEAR

SCALE: 1" = 1000' DRAWN BY: J.L.G. REVISED: 00-00-00

D  
TOPO

WORKSHEET  
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 08/12/98

API NO. ASSIGNED: 43-047-33178

WELL NAME: SAGE GROUSE 12B-14-8-22  
OPERATOR: CHANDLER & ASSOCIATES INC (N3320)  
CONTACT: Tracy Henline (435) 789-1017

PROPOSED LOCATION:  
NWSW 14 - T08S - R22E  
SURFACE: 2313-FSL-0707-FWL  
BOTTOM: 2806-FSL-0896-FWL  
UINTAH COUNTY  
UNDESIGNATED FIELD (002)

LEASE TYPE: FED  
LEASE NUMBER: U-73687  
SURFACE OWNER: Federal

INSPECT LOCATION BY: / /

TECH REVIEW	Initials	Date
Engineering		
Geology		
Surface		

PROPOSED FORMATION: GRRV

RECEIVED AND/OR REVIEWED:

☒ Plat  
☒ Bond: Federal ☒ State[] Fee[]  
(No. #124290364)  
☒ Potash (Y/N)  
☒ Oil Shale (Y/N) \*190-5(B)  
☒ Water Permit  
(No. 43-8496)  
☒ RDCC Review (Y/N)  
(Date: )  
☒ St/Fee Surf Agreement (Y/N)

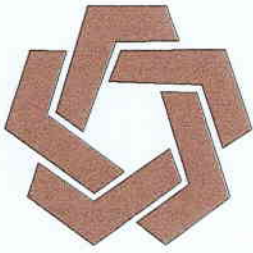
LOCATION AND SITING:

☐ R649-2-3. Unit  
☐ R649-3-2. General  
☒ R649-3-3. Exception  
☐ Drilling Unit  
Board Cause No:   
Date:

COMMENTS:

STIPULATIONS: ① FEDERAL APPROVAL

② DIRECTIONAL DRILLING



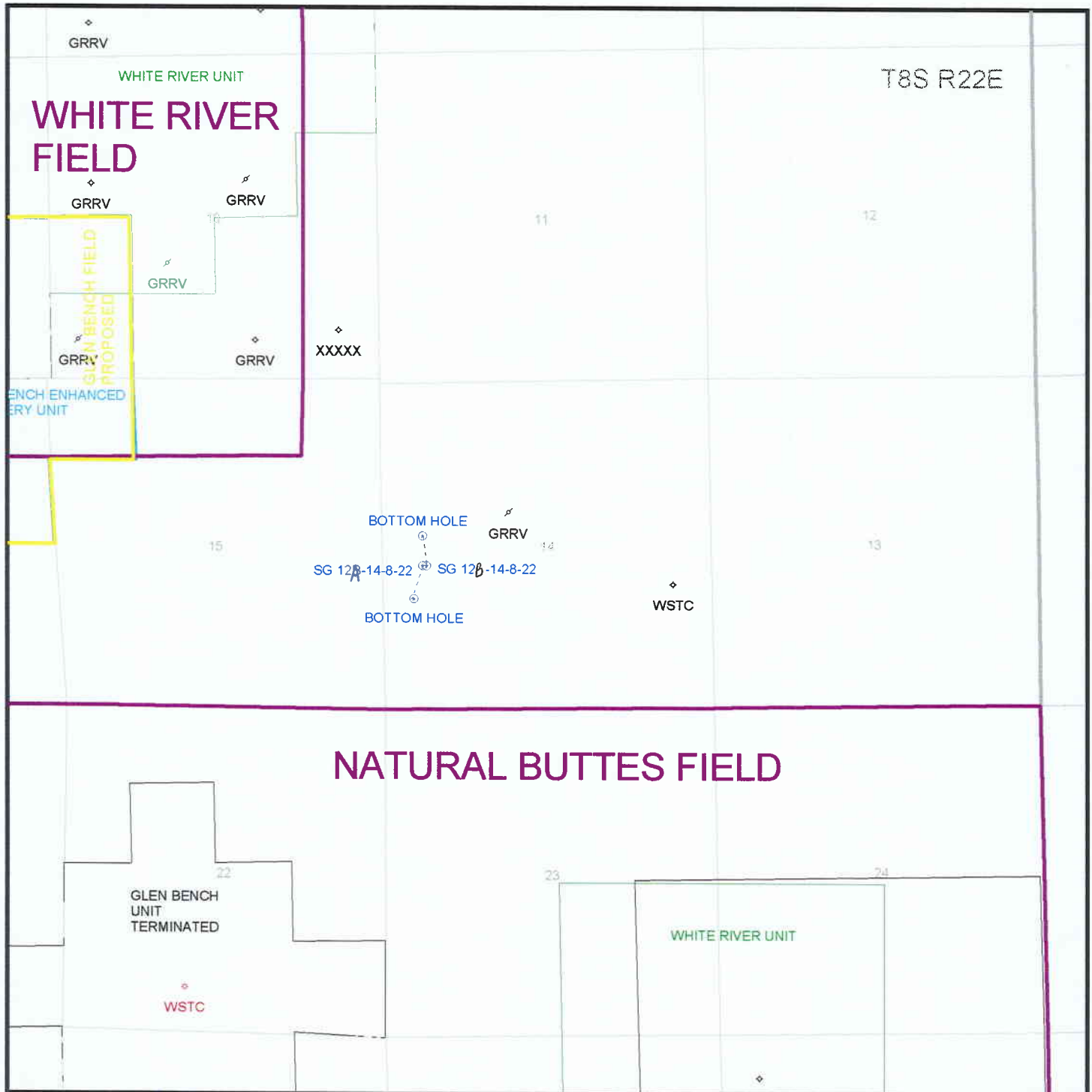
DIVISION OF OIL, GAS & MINING

OPERATOR: CHANDLER & ASSOCIATES (N3320)

FIELD: UNDESIGNATED (002)

SEC. 14, TWP 8S, RNG 22E

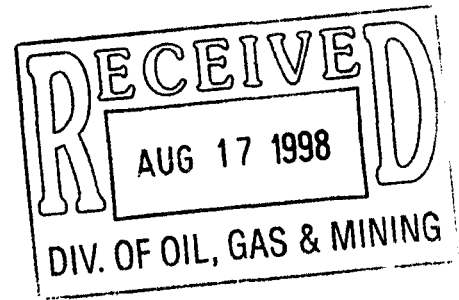
COUNTY: UINTAH UAC: R649-3-3 EXCEPTION SPACING



DATE PREPARED:  
13-AUG-1998

August 14, 1998

State of Utah  
Division of Oil Gas & Mining



Attn: Mike Hebertson

Dear Mike:

Please find enclosed a revised A.P.D. cover sheet and Legal plat for the Chandler & Associates, Inc. **Sage Grouse #12B-14-8-22**. The change that was made was the distance on the Bottom Hole was changed from 707' FWL to 896' FWL.

Also, please find a letter explaining the reasons for the exception locations.

Thank You,

A handwritten signature in black ink, appearing to read "Tracy D. Henline". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Tracy D. Henline  
Agent for Chandler & Associates, Inc.



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL  
WELL ☐

GAS  
WELL ☒

OTHER

SINGLE  
ZONE ☐

MULTIPLE  
ZONE ☐

2. NAME OF OPERATOR

(303) 295-0400

Chandler & Associates, Inc.

3. ADDRESS AND TELEPHONE NO.

475 Seventeenth Street, Suite 1000 Denver, CO 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
At surface

2313' FSL 707' FWL (surface)

At proposed prod. zone 2806' FSL 896' FWL (bottom hole)

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

See Topo Map "A" (attached)

15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any)

707'

16. NO. OF ACRES IN LEASE

1920

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

40

18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

1600'

19. PROPOSED DEPTH

3840' TVD 4084' MD

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

5098' GR

22. APPROX. DATE WORK WILL START\*

A.S.A.P.

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	9 5/8"	36#	300' TVD	(See attached drilling plan)
8 3/4"	7"	23#	3700' TVD	(See attached drilling plan)
6 1/4"	4 1/2"	105#	3600' TVD	(See attached drilling plan)
			3840' TVD	

1. M.I.R.U.

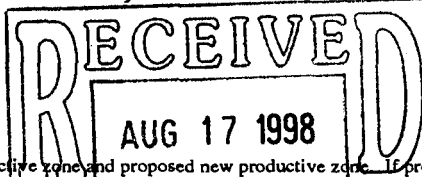
2. Drill to T.D. 3840' TVD 4084' MD

3. Run 7" casing and 4 1/2" liner if commercial production is indicated.

4. If dry hole, well will be plugged and abandoned as instructed by the BLM

5. Well will be drilled with fresh water to 3804' MD, then Air to T.D. mud  
will be in place to run 7" casing and 4 1/2" liner.

I hereby certify that I am responsible by the terms and conditions of the lease  
to conduct lease operations. Bond Coverage pursuant to 43 CFR 3104 for lease  
activities is being provided by Chandler & Associates, Inc. BLM Bond #124290364  
with CNA.



IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or  
deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout prevention program, if any.

24.

SIGNED

*Tracy D. Henline*

TITLE Agent for Chandler

DATE Aug. 7, 1998

(This space for Federal or State office use)

PERMIT NO.

43-047-33178

APPROVAL DATE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
CONDITIONS OF APPROVAL, IF ANY: **Federal Approval of this Action is Necessary**

APPROVED BY

*Bradley G. Hill*

TITLE

BRADLEY G. HILL  
RECLAMATION SPECIALIST III

DATE

8/19/98

\*See Instructions On Reverse Side

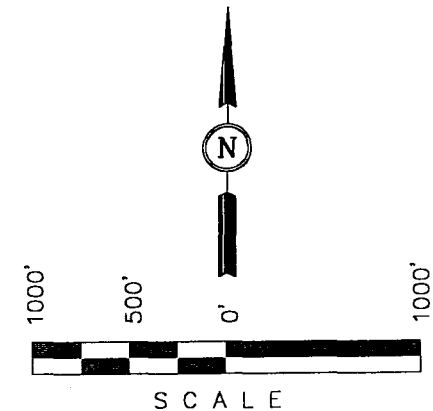
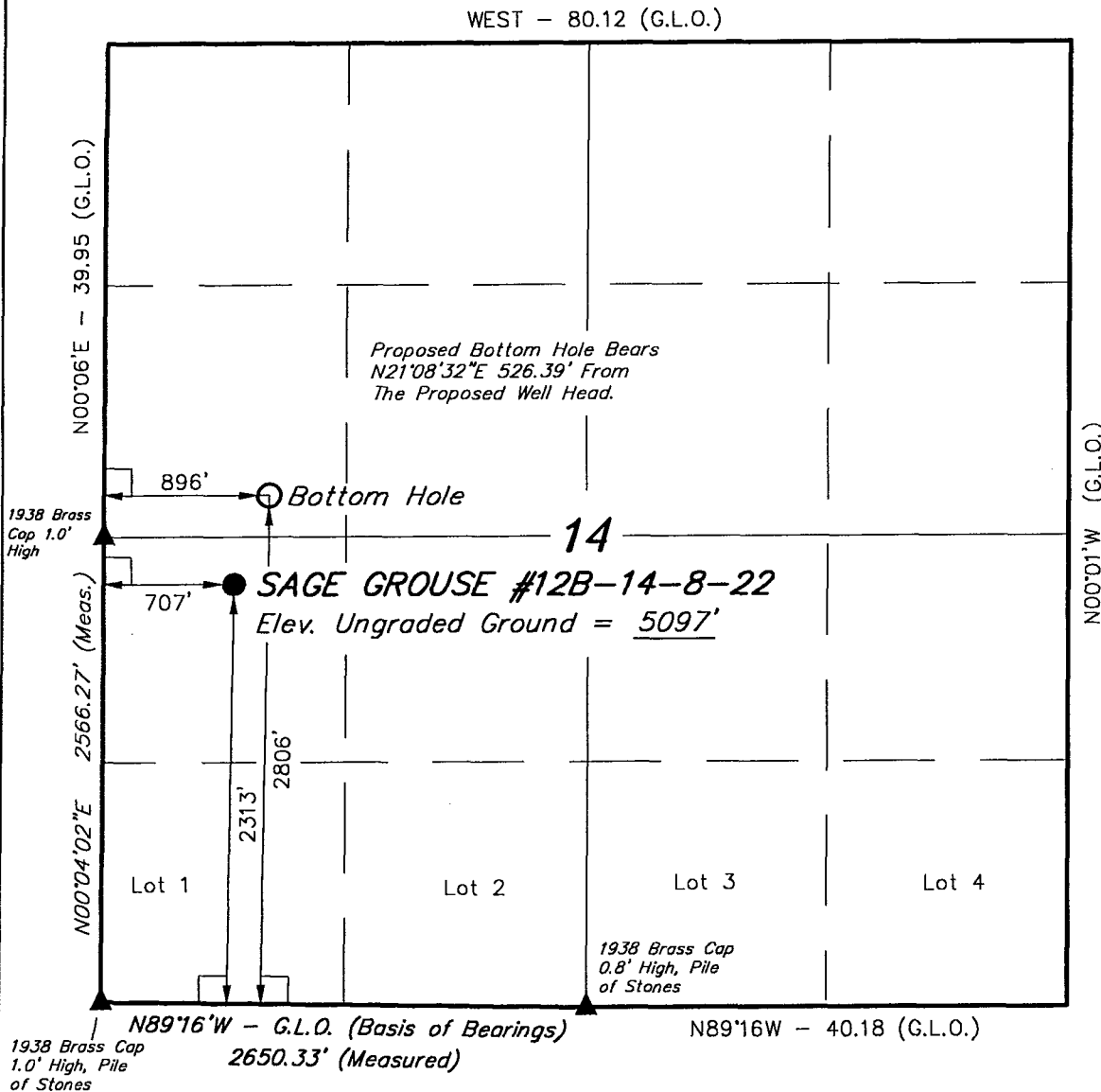
**T8S, R22E, S.L.B.&M.**

**CHANDLER & ASSOCIATES, INC.**

Well location, SAGE GROUSE #12B-14-8-22, located as shown in the NW 1/4 SW 1/4 of Section 14, T8S, R22E, S.L.B.&M. Uintah County, Utah.

**BASIS OF ELEVATION**

SPOT ELEVATION AT THE SOUTHWEST CORNER OF SECTION 14, T8S, R22E, S.L.B.&M. TAKEN FROM THE RED WASH SW QUADRANGLE, UTAH, UTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5070 FEET.



**CERTIFICATE**

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEY MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

**R. ROBERT L. JONES**  
REGISTERED LAND SURVEYOR  
No. 161319  
STATE OF UTAH

Revised: 8-14-98 C.B.T.

**UINTAH ENGINEERING & LAND SURVEYING**  
**85 SOUTH 200 EAST - VERNAL, UTAH 84078**  
**(435) 789-1017**

SCALE 1" = 1000'	DATE SURVEYED: 7-10-98	DATE DRAWN: 7-15-98
PARTY L.D.T. C.G. C.B.T.	REFERENCES G.L.O. PLAT	
WEATHER HOT	FILE CHANDLER & ASSOCIATES, INC.	

**LEGEND:**

- └─ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

August 14, 1998

State of Utah  
Division of Oil Gas & Mining

Re: Letter of Exception Location

Attn: Mike Hebertson

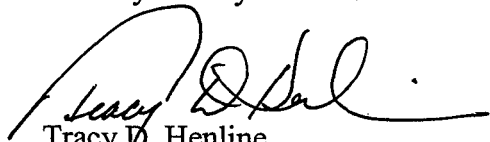
Dear Mike:

Chandler & Associates, Inc. respectfully submits the following information for Exception Locations on the below mention well locations.

The Sage Grouse #12A-14-8-22 located 2288' FSL 707' FWL (Surface) 1795' FSL 518' FWL (Bottom Hole) & Sage Grouse #12B-14-8-22 located 2313' FSL 707' FWL (Surface) 2806' FSL 896' FWL (Bottom Hole) of Section 14, T8S, R22E, S.L.B.&M. which are proposed to be drilled directionally from the same pad were moved out of the window due to favorable formation fractures which may be present at the targeted bottom hole locations. We are utilizing one well pad for (2) well locations to minimize surface disturbance. Chandler & Associates is the Lease Holder (U-73687) for Section 11 (all) Section 14 (all) Section 23 (all), T8S, R22E, S.L.B.&M.

If you have any questions concerning this matter please feel free to call me at (435) 789-1017. or Mr. Terry J. Cox at Chandler & Associates, Inc. (303) 295-0400.

Thank you for your attention to this matter,



Tracy D. Henline  
Agent for Chandler & Associates, Inc.

cc: Terry J. Cox  
cc: Jim Simonton

\* 980820 T. Henline 100% Surf. Sec. 14 "Federal" *lec*



# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

1594 West North Temple, Suite 1210

PO Box 145801

Salt Lake City, Utah 84114-5801

801-538-5340

801-359-3940 (Fax)

801-538-7223 (TDD)

Michael O. Leavitt  
Governor

Lowell P. Braxton  
Division Director

August 19, 1998

Chandler & Associates, Inc.  
475 Seventeenth Street, Suite 1000  
Denver, Colorado 80202

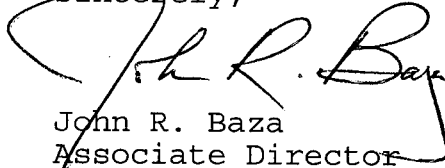
Re: Sage Grouse 12B-14-8-22 Well, 2313' FSL, 707' FWL,  
NW SW, Sec. 14, T. 8 S., R. 22 E., Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-33178.

Sincerely,



John R. Baza  
Associate Director

lwp

Enclosures

cc: Uintah County Assessor

Bureau of Land Management, Vernal District Office



Operator: Chandler & Associates, Inc.  
Well Name & Number: Sage Grouse 12A-14-8-22  
API Number: 43-047-33177  
Lease: U-73687  
Location: NW SW Sec. 14 T. 8 S. R. 22 E.

### Conditions of Approval

1. General  
Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for Permit to Drill.
2. Notification Requirements  
Notify the Division within 24 hours prior to spudding the well. Contact Jim Thompson at (801)538-5336.  
  
Notify the Division prior to commencing operations to plug and abandon the well. Contact Dan Jarvis at (801) 538-5338 or Robert Krueger at (801) 538-5274.
3. Reporting Requirements  
All required reports, forms and submittals shall be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.
4. State approval of this well does not supersede the required federal approval which must be obtained prior to drilling.
5. In accordance with Utah Admin. R.649-3-11, Directional Drilling, submittal of a complete angular deviation and directional survey report is required.



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt  
Governor

Ted Stewart  
Executive Director

James W. Carter  
Division Director

1594 West North Temple, Suite 1210

Box 145801

Salt Lake City, Utah 84114-5801

801-538-5340

801-359-3940 (Fax)

801-538-7223 (TDD)

September 1, 1998

REVISED APD

Chandler & Associates, Inc.  
475 Seventeenth Street, Suite 1000  
Denver, Colorado 80202

Re: Sage Grouse 12B-14-8-22 Well, 2313' FSL, 707' FWL, NW SW,  
Sec. 14, T. 8 S., R. 22 E., Uintah County, Utah

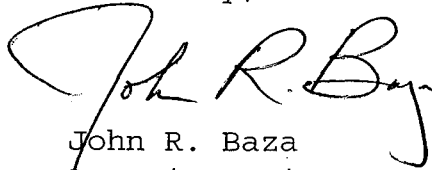
Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

Appropriate information has been submitted to DOGM by Chandler & Associates, Inc. and administrative approval of the requested exception location is hereby granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-33178.

Sincerely,



John R. Baza  
Associate Director

lwp

Enclosures

cc: Uintah County Assessor

Bureau of Land Management, Vernal District Office

Operator: Chandler & Associates, Inc.  
Well Name & Number: Sage Grouse 12B-14-8-22  
API Number: 43-047-33178  
Lease: U-73687  
Location: NW SW Sec. 14 T. 8 S. R. 22 E.

### Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for Permit to Drill.

2. Notification Requirements

Notify the Division within 24 hours prior to spudding the well. Contact Jim Thompson at (801)538-5336.

Notify the Division prior to commencing operations to plug and abandon the well. Contact Dan Jarvis at (801) 538-5338 or Robert Krueger at (801) 538-5274.

3. Reporting Requirements

All required reports, forms and submittals shall be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. State approval of this well does not supersede the required federal approval which must be obtained prior to drilling.

5. In accordance with Utah Admin. R.649-3-11, Directional Drilling, submittal of a complete angular deviation and directional drilling survey report is required.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL WELL ☐

GAS WELL ☒

OTHER

SINGLE ZONE ☐

MULTIPLE ZONE ☐

2. NAME OF OPERATOR

(303) 295-0400

Chandler & Associates, Inc.

3. ADDRESS AND TELEPHONE NO.

475 Seventeenth Street, Suite 1000 Denver, CO 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*

At surface

2313' FSL 707' FWL (surface)

At proposed prod. zone

2806' FSL 896' FWL (bottom hole)

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

See Topo Map "A" (attached)

15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT.  
(Also to nearest drig. unit line, if any)

707'

16. NO. OF ACRES IN LEASE

1920

17. NO. OF ACRES ASSIGNED TO THIS WELL

40

18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.

1600'

19. PROPOSED DEPTH

3840' TVD 4084' MD

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

5098' GR

22. APPROX. DATE WORK WILL START\*

A.S.A.P.

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	9 5/8"	36#	300' TVD	(See attached drilling plan)
8 3/4"	7"	23#	3700' TVD	(See attached drilling plan)
6 1/4"	4 1/2"	105#	3600' TVD	(See attached drilling plan)
			3840' TVD	

1. M.I.R.U.
2. Drill to T.D. 3840' TVD 4084' MD
3. Run 7" casing and 4 1/2" liner if commercial production is indicated.
4. If dry hole, well will be plugged and abandoned as instructed by the BLM
5. Well will be drilled with fresh water to 3804' MD, then Air to T.D. mud will be in place to run 7" casing and 4 1/2" liner.

I hereby certify that I am responsible by the terms and conditions of the lease to conduct lease operations. Bond Coverage pursuant to 43 CFR 3104 for lease activities is being provided by Chandler & Associates, Inc. BLM Bond #124290364 with CNA.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depth. Give horizontal deviation, if any.

24.

SIGNED

Tracy D. Henline

TITLE

Agent for Chandler

DATE

Aug. 7, 1998

(This space for Federal or State office use)

PERMIT NO. NOTICE OF APPROVAL

APPROVAL DATE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY

TITLE

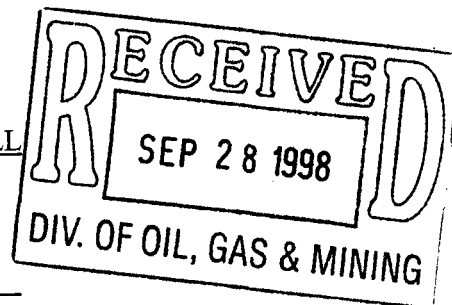
Assistant Field Manager  
Mineral Resources

DATE

SEP 24 1998

\*See Instructions On Reverse Side

CONDITIONS OF APPROVAL  
APPLICATION FOR PERMIT TO DRILL



Company/Operator: Chandler & Associates Inc.

Well Name & Number: 12B-14-8-22

API Number: 43-047-33178

Lease Number: U-73687

Location: SWNW Sec. 14 T. 08S R. 22E

**NOTIFICATION REQUIREMENTS**

- Location Construction - at least forty-eight (48) hours prior to construction of location and access roads.
- Location Completion - prior to moving on the drilling rig.
- Spud Notice - at least twenty-four (24) hours prior to spudding the well.
- Casing String and Cementing - at least twenty-four (24) hours prior to running casing and cementing all casing strings.
- BOP and Related Equipment Tests - at least twenty-four (24) hours prior to initiating pressure tests.
- First Production Notice - within five (5) business days after new well begins, or production resumes after well has been off production for more than ninety (90) days.

For more specific details on notification requirements, please check the Conditions of Approval for Notice to Drill and Surface Use Program.

## CONDITIONS OF APPROVAL FOR NOTICE TO DRILL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas Orders, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative by the operator to insure compliance.

Be aware fire restrictions may be in effect when location is being constructed and/or when well is being drilled. Contact the appropriate Surface Management Agency for information.

### A. DRILLING PROGRAM

1. Estimated Depth at Which Oil, Gas, Water, or Other Mineral Bearing Zones are Expected to be Encountered

Report **ALL** water shows and water-bearing sands to Tim Ingwell of this office **prior to setting the next casing string or requesting plugging orders**. Faxed copies of State of Utah form OGC-8-X are acceptable. If noticeable water flows are detected, submit samples to this office along with any water analyses conducted.

All usable water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling, will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

2. Pressure Control Equipment

The BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc., for a **2M** system and individual components shall be operable as designed. Chart recorders shall be used for all pressure tests.

Test charts, with individual test results identified, shall be maintained on location while drilling and shall be made available to a BLM representative upon request.

If an air compressor is on location and is being utilized to provide air for the drilling medium while drilling, the special drilling requirements in Onshore Oil and Gas Order No. 2, regarding air or gas drilling shall be adhered to. If a mist system is being utilized then the requirement for a deduster shall be waived.

3. Casing Program and Auxiliary Equipment

Surface casing shall have centralizers on the bottom three joints, with a minimum of one centralizer per joint.

If conductor pipe is set it will be cemented to surface. If drive pipe is used it will be pulled prior to cementing surface casing.

As a minimum, the usable water shall be isolated and/or protected by having a cement top for the production casing at least 200 ft. above the top of the shallowest potential productive zone. If gilsonite is encountered while drilling, it shall be isolated and/or protected via the cementing program.

4. Mud Program and Circulating Medium

Hazardous substances specifically listed by the EPA as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing, or completion operations.

No chromate additives will be used in the mud system on Federal and Indian lands without prior BLM approval to ensure adequate protection of fresh water aquifers.

5. Coring, Logging and Testing Program

Daily drilling and completion progress reports shall be submitted to this office on a weekly basis.

All Drill Stem tests (DST) shall be accomplished during daylight hours, unless specific approval to start during other hours is obtained from the AO. However, DSTs may be allowed to continue at night if the test was initiated during daylight hours and the rate of flow is stabilized and if adequate lighting is available (i.e., lighting which is adequate for visibility and vaporproof for safe operations). Packers can be released, but tripping should not begin before daylight unless prior approval is obtained from the AO.

A cement bond log (CBL) will be run from the production casing shoe to **Top of Cement** and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.

Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. One copy of all logs, core descriptions, core analyses, well-test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. Samples (cuttings, fluids, and/or gases) will be submitted when requested by the AO.

6. Notifications of Operations

No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the AO. If operations are to be suspended, prior approval of the AO will be obtained and notification given before resumption of operations.

The Vernal District Office shall be notified, during regular work hours (7:45 a.m.-4:30 p.m., Monday through Friday except holidays), at least 24 hours prior to spudding the well.

Operator shall report production data to MMS pursuant to 30 CFR 216.5 using form MMS/3160.

Immediate Report: Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported in accordance with the requirements of NTL-3A or its revision.

If a replacement rig is contemplated for completion operations, a "Sundry Notice" (Form 3160-5) to that effect will be filed, for prior approval of the AO, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig.

The date on which production is commenced or resumed will be construed for oil wells as the date on which liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which liquid hydrocarbons are first produced into a permanent storage facility, whichever first occurs; and, for gas wells as the date on which associated liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which gas is first measured through permanent metering facilities, whichever first occurs.

Should the well be successfully completed for production, the AO will be notified when the well is placed in a producing status. Such notification will be sent by telegram or other written communication, not later than five (5) days following the date on which the well is placed on production.

Gas produced from this well may not be vented or flared beyond an initial authorized test period of 30 days or 50 MMCF following its completion, whichever occurs first, without the prior written approval of the Authorized Officer. Should gas be vented or flared without approval beyond the authorized test period, the operator may be directed to shut-in the well until the gas can be captured or approval to continue venting or flaring as uneconomic is granted and the operator shall be required to compensate the lessor for that portion of the gas vented or flared without approval which is determined to have been avoidably lost.



A schematic facilities diagram as required by 43 CFR 3162.7-5 (b.9. d.), and shall be submitted to the appropriate District Office within sixty (60) days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with 43 CFR 3162.7-5 (b. 4).

No well abandonment operations will be commenced without the prior approval of the AO. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the AO. A "Subsequent Report of Abandonment" Form 3160-5, will be filed with the AO within thirty (30) days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the AO or his representative, or the appropriate Surface Managing Agency.

7. Other Information

All loading lines will be placed inside the berm surrounding the tank battery.

All off-lease storage, off-lease measurement, or commingling on-lease or off-lease will have prior written approval from the AO.

The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place prior to any deliveries. Tests for meter accuracy will be conducted following initial installation and at least quarterly thereafter. The AO will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports will be submitted to the Vernal District Office. All meter measurement facilities will conform with Onshore Oil & Gas Order No. 4 for liquid hydrocarbons and Onshore Oil & Gas Order No. 5 for natural gas measurement.

The use of materials under BLM jurisdiction will conform to 43 CFR 3610.2-3.

There will be no deviation from the proposed drilling and/or workover program without prior approval from the AO. Safe drilling and operating practices must be observed. All wells, whether drilling, producing, suspended, or abandoned will be identified in accordance with 43 CFR 3162.

"Sundry Notice and Report on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3162.3-2.

Section 102(b)(3) of the Federal Oil and Gas Royalty Management Act of 1982, as implemented by the applicable provisions of the operating regulations at Title 43 CFR 3162.4-1(c), requires that "not later than the 5th business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site, or resumes production in the case of a well which has been off production for more than 90 days, the operator shall notify the authorized officer by letter or sundry notice, Form 3160-5, or orally to

be followed by a letter or sundry notice, of the date on which such production has begun or resumed."

If you fail to comply with this requirement in the manner and time allowed, you shall be liable for a civil penalty of up to \$10,000 per violation for each day such violation continues, not to exceed a maximum of 20 days. See Section 109(c)(3) of the Federal Oil and Gas Royalty Management Act of 1982 and the implementing regulations at Title 43 CFR 3162.4-1(b)(5)(ii).

APD approval is valid for a period of one (1) year from the signature date. An extension period may be granted, if requested, prior to the expiration of the original approval period.

In the event after-hours approval or notification is necessary, please contact one of the following individuals:

Wayne Bankert (801) 789-4170  
Petroleum Engineer

Ed Forsman (801) 789-7077  
Petroleum Engineer

Jerry Kenczka (801) 789-1190  
Petroleum Engineer

BLM FAX Machine (801) 781-4410

## EPA'S LIST OF NONEXEMPT EXPLORATION AND PRODUCTION WASTES

While the following wastes are nonexempt, they are not necessarily hazardous.

- Unused fracturing fluids or acids
- Gas plant cooling tower cleaning wastes
- Painting wastes
- Oil and gas service company wastes, such as empty drums, drum rinsate, vacuum truck rinsate, sandblast media, painting wastes, spent solvents, spilled chemicals, and waste acids
- Vacuum truck and drum rinsate from trucks and drums, transporting or containing nonexempt waste
- Refinery wastes
- Liquid and solid wastes generated by crude oil and tank bottom reclaimers
- Used equipment lubrication oils
- Waste compressor oil, filters, and blowdown
- Used hydraulic fluids
- Waste solvents
- Waste in transportation pipeline-related pits
- Caustic or acid cleaners
- Boiler cleaning wastes
- Boiler refractory bricks
- Incinerator ash
- Laboratory wastes
- Sanitary wastes
- Pesticide wastes
- Radioactive tracer wastes
- Drums, insulation and miscellaneous solids.

### SURFACE USE PROGRAM

The location is within a half mile of well Chandler Sage Grouse 6-14-8-22 drilled in 1996 (completed on 8-15-96). Two wells would share the same pad. See the APDs for further details.

-Access roads and surface disturbing activities will conform to standards outlined in the Bureau of Land Management and Forest Service publication: Surface Operating Standards for Oil and Gas Exploration and Development, (1989).

The road shall be constructed/upgraded to meet the standards of the anticipated traffic flow and all-weather road requirements. Construction/upgrading shall include ditching, draining, and crowning (2 to 3%). Graveling or capping the roadbed will be required as necessary to provide a well constructed safe road. Prior to construction/upgrading, the proposed road surface or existing road shall be cleared of any snow cover and allowed to dry completely. Traveling off the 30 foot right-of-way will not be allowed. Should mud holes develop, they shall be filled in to prevent detours. Road drainage crossings shall be of the typical dry creek drainage crossing type. Crossings shall be designed so they will not cause siltation or accumulation of debris in the drainage crossing nor shall the drainage be blocked by the roadbed. Erosion of drainage ditches by runoff water shall be prevented by diverting water off at frequent intervals by means of cutouts. Upgrading shall not be allowed during muddy conditions. When snow is removed from the road during the winter months, the snow should be pushed outside of the burrow ditches and the turn outs should be kept clear so that when the snow melts the water will be channeled away from the road.

Windrow topsoil materials at the Northwest side of the location. Seed windrowed piles with the seed mixture listed below, immediately after windrowing, and work seed into the piles with caterpillar tractor.

Stockpile enough topsoil near the reserve pit (near stake 3) so that when the reserve pit is reclaimed, it can be respread over the pit location. Spread the topsoil over the reserve pit with the seed mix listed below, and work seed into the ground with caterpillar tractor. If the reserve pit is in a cut area, then the pit should be filled in and recontoured to blend with the original contours prior to reseeding.

Needle and thread	Stipa comata	2 lbs/acre
Shadscale	Atriplex confertifolia	3 lbs/acre
Fourwing Saltbush	Atriplex canescens	4 lbs/acre
Indian Ricegrass	Oryzopsis hymenoides	3 lbs/acre

All poundages are in pure live seed. This seed mixture should also be used for final abandonment.

All permanent (on location for six months or longer) facilities constructed or installed (including pumping units) will be painted a flat, non-reflective earthtone color to match one of the standard environmental colors, as determined by the Rocky Mountain Five State Interagency Committee.

The reserve pit will be lined with a liner of 10 mil thickness over an adequate amount of straw bedding material to conserve water and prevent seepage into the sandy soils in this area.

All pits will be fenced according to the following minimum standards:

Those described in the APD.

The net wire shall be no more than 2 inches above the ground. The barbed wire shall be 3 inches above the net wire. Total height of the fence shall be at least 42 inches.

Corner posts shall be braced in such a manner as to keep the fence tight at all times. Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall not exceed 16 feet.

The reserve pit will be fenced on three sides during drilling operations and on the fourth side when the rig moves off location. Fences around existing pits will be maintained until the pit reclamation operations occur and the pits are backfilled. Reclamation of the reserve pit will take place no later than the fall of the year after all drilling activity including initial well completion has ceased/been accomplished.

All lease and/or unit operations will be conducted in a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved plan of operations, and any applicable Notice to Lessees. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the operator's field representative to ensure compliance. A complete copy of the approved APD shall be on location during construction of the location and drilling activities.



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Vernal Field Office  
170 South 500 East  
Vernal, Utah 84078-2799

<http://www.blm.gov/utah/vernal>

Phone: (435) 781-4400  
Fax: (435) 781-4410

IN REPLY REFER TO:

3160  
UT08300

November 15, 1999

Chandler & Associates, Inc.  
475 Seventeenth Street, Suite 1000  
Denver, CO 80202

Re: Notification of Expiration  
Well No. Sage Grouse 12B-14-8-22  
NWSW, Sec. 14, T8S, R22E  
Lease No. U-73687

43-047-33178

Gentlemen:

The Application for Permit to Drill the above referenced well was approved on September 24, 1998. Since that date, no known activity has transpired at the approved location. Applications for Permit to Drill are effective for a period of one year. In view of the foregoing, this office is notifying you the approval of the referenced application has expired. If you intend to drill at this location at a future date, a new Application for Permit to Drill must be submitted.

This office requires a letter confirming that no surface disturbance has been made for this drill site. Any surface disturbance associated with the approved location of this well is to be rehabilitated. A schedule for this rehabilitation must be submitted to this office. Your cooperation in this matter is appreciated.

Sincerely,

Margie Herrmann  
Legal Instruments Examiner

cc: State Div. OG&M

DOGm  
'LA'  
DATE

